

XVI. *Characters of undescribed Diptera in the Collection of W. W. Saunders, Esq., F.R.S., &c. By FRANCIS WALKER, Esq., F.L.S., &c.—(Continued.)*

[Read 2nd February, 1857.]

Fam. 16. MUSCIDÆ.

Div. 1. CALYPTERÆ.

Sub-fam. 1. MYOPIDES.

Species few in number.

SYNOPSIS.

- * *Proboscis bigeniculata.*
- † *Antennarum articulus 2^{us} 3^o longior.* *Myopa*, Latr.
- †† *Antennarum articulus 2^{us} 3^o paullo brevior.*
- ‡ *Arista basalis.* *Dalmannia*, Desv. ; *Stachynia*, Macq.
- †† *Arista subapicalis.* *Stylogaster*, Macq.
- ** *Proboscis basi geniculata.* *Zodion*, Fabr.

Sub-fam. 2. TACHINIDES.

The study of this family is very difficult, owing to the abundance of species which it contains, and to the variety of characters by which they are distinguished. The number of species may be estimated at about 10,000, of which 1,000 are European. Specific descriptions of them are insufficient when they do not mention all the parts of the structure which are subject to variation, such as the following: The setæ, and especially those of the head; the frontalia; the face, whether inclined or vertical; the eyes; the antennæ; the form of the abdomen; the veins of the wings, and especially the præbrachial vein. The species are all parasitic on other insects, and almost every species has its peculiar prey, and has a corresponding variation in structure, and especially in the form of the antennæ. The length of the second joint of these organs should always be noticed, and the form of the third joint, which varies according to the sex, and according as the habit of the species varies, being the means which directs

it to its prey. The aperture on the inner side of this joint is very distinct in the *Echinomyiæ*, and probably may be discovered in all the species. The *Echinomyiæ* are the most highly developed group in the sub-family, the second joint of the antennæ having in them its greatest length, and the third joint its greatest development. The following synopsis includes most of the genera of *Tachina*, which is one of the seven groups into which this family is divided in *Ins. Brit. Dipt. vol. 2*:-

- * *Aristæ articulus 2^{us} longus.*
- † *Antennarum articulus 2^{us} 3^o non brevior.*
- ‡ *Palpi thorace non breviores.* *Dejeania*, Desv.
- ‡‡ *Palpi non longissimi.* *Echinomyia*, Dumeril.
- †† *Antennarum articulus 2^{us} 3^o brevior.*
- ‡ *Arista recta.*
- § *Palpi mediocres.*
- × *Antennarum articulus 3^{us} convexus.* *Jurinia*, Desv.
- ×× *Antennarum articulus 3^{us} linearis.* *Hystricia*, Macq.
- §§ *Palpi breves, graciles.*
- × *Facies non inclinata, nec nuda.* *Micropalpus*, Macq.
- ×× *Facies inclinata, nuda.* *Aprotheca*, Macq.
- ‡‡ *Arista flexa.*
- § *Facies non inclinata.*
- × *Epistoma non prominens.*
- ⊕ *Palpi non extantes.* *Thryptocera*, Desv.
- ++ *Palpi extantes.* *Exopalpus*, Macq.
- ×× *Epistoma prominens.* *Gonystylum*, Macq.
- §§ *Facies inclinata.* *Illigeria*, Meig.
- ×× *Aristæ articulus 2^{us} brevis.*
- † *Caput setis duabus longis erectis.* *Hephaestophora*, Macq.
- †† *Caput setis nullis longis erectis.*
- ‡ *Corpus latum.*
- § *Antennæ brevis.* *Trixa*, Meig.
- §§ *Antennæ plus minusve longæ.*
- × *Abdomen brevissimum.* *Trichophora*, Macq.
- ×× *Abdomen non brevissimum.*
- ⊕ *Palpi setis longis.* *Lasiopalpus*, Macq.
- ++ *Palpi setis nullis longis.*
- × *Antennarum articulus 3^{us} 2^o non longior.* *Hystricephala*, Macq.
- ×× *Antennarum articulus 3^{us} 2^o vix duplo longior.*
- ⊕ *Oculi pubescentes.* *Nemoræa*, Macq.
- ++ *Oculi nudi.*

- ++ Abdomen metallicum. *Chlorogaster*, Macq.
- ++++ Abdomen non metallicum. *Chætoprosopa*, Macq.
- × × × Antennarum articulus 3^{us} 2^o duplo longior.
 - Palpi breves.
 - ++ Frons setis triseriatim dispositis. *Tritaxys*, Macq.
 - ++++ Frons setis non triseriatim dispositis. *Prosopochæta*, Macq.
 - Palpi sat longi. *Exechopalpus*, Macq.
 - × × × Antennarum articulus 3^{us} 2^o triplo aut quadruplo longior.
 - Tibiæ posticæ ciliatæ. *Blepharipeza*, Macq.
 - Tibiæ posticæ nudæ.
 - ++ Antennarum articulus 3^{us} convexus. *Epicampocera*, Macq.
 - ++++ Antennarum articulus 3^{us} linearis.
 - ∞ Antennæ epistoma non attingentes.
 - O ≈ Facies non valde setosa. *Belvosia*, Desv.
 - OO ≈ Facies valde setosa. *Polychoæta*, Macq.
 - ∞∞ Antennæ epistoma sæpissime attingentes. *Eurigaster*, Macq.
 - †‡ Corpus plus minusve angustum.
 - § Arista nuda.
 - × Antennarum articulus 3^{us} 2^o sextus longior. *Phorocera*, Macq.
 - × × Antennarum articulus 3^{us} 2^o triplo aut quadruplo longior.
 - Antennarum articulus 3^{us} 2^o quadruplo longior.
 - ++ Frons fasciis nullis intermediis. *Masicera*, Macq.
 - ∞ Vena præbrachialis integra.
 - ∞∞ Vena præbrachialis incompleta.
 - O Facies erecta. *Roeselia*, Meig.
 - O O Facies obliqua. *Actia*, Meig.
 - ++++ Frons fasciis duabus intermediis. *Heterometopia*, Macq.
 - Antennarum articulus 3^{us} 2^o triplo longior.
 - Tibiæ posticæ non ciliatæ. *Lydella*, Macq.
 - ++++ Tibiæ posticæ ciliatæ. *Blepharella*, Macq.
 - × × Antennarum articulus 3^{us} 2^o non triplo aut non plus duplo longior.
 - Antennæ elongatæ.
 - ++ Abdomen oviductu nullo elongato.
 - ∞ Oculi nudi; abdominis segmenta setis nullis discalibus.
 - O Antennarum articulus 3^{us} 2^o multo longior.
 - ↓ Frons setæ minimæ. *Microtrichodes*, Macq.
 - || Frons setæ non minimæ.
 - Frons prominens.

O Antennarum articulus 3^{us} 2° duplo longior. *Lamprometopia*, Macq.

O O Antennarum articulus 3^{us} 2° plus duplo longior.

 | Facies non inclinata. *Frontina*, Macq.

 || Facies inclinata.

 = Vena transversa discalis ad venæ discalis flexuram propior. *Metopia*, Meig.

== Vena transversa discalis ad venæ discalis flexuram non propior. *Degeria*, Meig.

++ Frons non prominens.

 ÷ Abdomen ovatum; frontis setæ vix descendentes. *Kodigaster*, Macq.

÷÷ Abdomen ellipticum; frontis setæ usque ad faciei medium descendentes.

÷÷ Antennarum articuli 2^{us} et 3^{us} longitudine fere æqualis. *Platytaenia*, Macq.

÷÷÷ Antennarum articulus 3^{us} 2° multo longior. *Tachina*, Fabr.

∞∞ Oculi pubescentes; corpus viride micans; abdominis segmenta setis discalibus. *Gymnocheta*, Desv.

++++ Abdomen oviductu elongato corneo. *Teretophora*, Macq.

++ Antennæ breves.

 × Caput latum. *Clytia*, Desv.

 ×× Caput vix latum.

 → Facies inclinata. *Apodacra*, Macq.

++ Antennæ non inclinata.

 ++ Fascia frontalis linearis. *Senotainia*, Macq.

++ Antennæ non linearis. *Miltogramma*, Meig.

§§ Arista villosa aut tomentosa.

 × Corpus sæpissime flavescente-cinereum; maris frons perangusta. *Myobia*, Macq.

×× Corpus nigrum, nitens; maris frons latiuscula.

 → Alæ spina costali.

 ++ Vena præbrachialis costalem attingens.

 ∞ Abdomen hamulis duobus apicalibus. *Labidigaster*, Macq.

∞∞ Abdomen hamulis nullis.

O Oviductus non prominens.

 | Abdomen non longum.

 + Antennarum articulus 3^{us} 2° quintriplo longior. *Leptostylum*, Macq.

++ Antennarum articulus 3^{us} 2° non quintriplo longior. *Sericocera*, Macq.

++ Antennarum articulus 3^{us} 2° triplo longior. *Aporia*, Macq.

 || Abdomen longum. *Megistogaster*, Macq.

≈≈ Oviductus prominens. *Uramyia*, Desv.
 + + + Vena præbrachialis cubitalem attingens.
 ∞ Vena præbrachialis cubitalem apicem versus attingens.
 — Arista villosa ; vena præbrachialis post flexuram arcuata. *Anthracia*, Meig.
 = Arista vix tomentosa ; vena præbrachialis post flexuram recta. *Tryphora*, Meig.
 ∞∞ Vena præbrachialis cubitalem longe ab apice attingens.
 O Facies peroibliqua ; vena præbrachialis post flexuram subarcuata. *Trichoprosopa*, Macq.
 O O Facies vix obliqua ; vena præbrachialis post flexuram recta. *Scopolia*, Desv.
 + + Alæ spina nulla costali. *Melanophora*, Meig.
 §§§ Arista plumosa.
 × Antennarum articulus 3^{us} 2° triplo longior.
 → Corpus ex parte pallidum. *Ochropleurum*, Macq.
 + + Corpus non pallidum. *Ebenia*, Macq.
 × × Antennarum articulus 3^{us} 2° quadruplo longior. *Trichostylum*, Macq.

The genera *Exorista* and *Senometopia* may be associated with *Eurigaster*, *Phorocera*, and *Masicera*.

Most of the exotic genera are thus distributed geographically :—

AMERICA.—*Senotainia*, *Prosopocheta*, *Exopalpus*, *Trichoprosopa*, *Gonystylum*, *Aporia*, *Ebenia*, *Trichophora*, *Chætoprosopa*, *Microtrichodes*.

AFRICA.—*Hoplacephala*, *Lamprometopia*, *Hystricephala*.

ASIA.—*Ochropleurum*, *Blepharella*.

AUSTRALIA.—*Trichostylum*, *Hetcrometopia*, *Aprotheca*, *Tritaxys*, *Exechopalpus*, *Polychæta*, *Chlorogaster*, *Teretrophora*.

Genus *ECHINOMYIA*, Dumeril.

Echinomyia furiosa.

Mas.—Nigricans, luteo-tomentosa, subtus pallide testacea, frontalibus piceis, oculis pubescentibus, palpis antennisque rufescentibus, thorace vittis quatuor interruptis nigris, scutello pedibusque rufescentibus, abdomine rubro, alis cinereis, alulis testaceis.

Male.—Blackish, with luteous tomentum, pale testaceous beneath ; head and thorax thickly beset with stout black bristles, head clothed behind and beneath with pale yellow hairs ; frontalia piceous, widening much towards the antennæ ; a few stout bristles

on each side of the epistoma, which is prominent ; eyes pubescent ; palpi clavate, reddish, antennæ reddish, third joint convex above, longer than the second arista, black, stout, longer than the third joint ; thorax with four slight interrupted black stripes ; scutellum reddish ; abdomen deep red, shining, armed with numerous black spines ; legs reddish ; wings grey ; veins black, præbrachial vein forming a right angle at its flexure, straight from thence to its tip, which is at some distance in front of the tip of the wing ; discal transverse vein undulating, parted by less than its length from the border, and by hardly more than half its length from the flexure at the præbrachial ; alulæ testaceous.

Length of the body 6 lines ; of the wings 10 lines.

Rio Grande.

Echinomyia platymesa.

Fæm.—Nigra, linearis, lurido-tomentosa, vix setosa, capite aurato subtus argenteo, frontalibus atris, facialibus nigro-lineatis, oculis nudis, scutello ferrugineo, pectore cano, abdome ferrugineo-rubo depresso, pedibus nigris non setosis, femoribus fulvis, alis obscure fuscis apud marginem obscure cinereis, alulis testaceis.

Female.—Body linear, with very few black bristles ; head gilded above, whitish silvery beneath, frontalia deep black, linear, facialia on each side with a black line, which is dilated towards the epistoma, the latter is slightly prominent ; eyes bare ; palpi short ; antennæ black, third joint rounded at the tip, much longer than the second joint, arista much longer than the third joint ; thorax with lurid tomentum, scutellum ferruginous ; pectus hoary ; abdomen ferruginous, red, rather flat ; legs black, not setose, femora tawny ; wings dark brown, irregularly dark grey along the hind border ; veins black, præbrachial vein forming an obtuse angle at its flexure, slightly curved from thence to its tip, which joins the costal at the tip of the wing ; discal transverse vein undulating, parted by less than half its length from the border, and by rather more than half its length from the flexure of the præbrachial vein ; alulæ testaceous.

Length of the body 6 lines ; of the wings 11 lines.

China.

Echinomyia stolida.

Mas.—Nigra, crassa, cinereo-tomentosa, capite cervino antice subtusque albido subtus tumido, frontalibus luteis, palpis albidis, antennis rufescensibus, thorace subvittato, lateribus,

scutello pectoreque fulvis, abdomine rufescente-fulvo, vitta nigra, maculis duabus dorsalibus trigonis cinereis, pedibus fulvis, alis cinereis basi fulvis, alulis subcinereis fulvo-marginatis.

Male.—Black, very stout, with cinereous tomentum ; head fawn colour above, whitish in front and beneath, with pale yellowish hairs behind and beneath, somewhat tumid beneath ; frontalia pale luteous, widening towards the antennæ, bristles on each side irregular ; facialia without bristles except towards the epistoma, which is very prominent ; palpi whitish ; antennæ reddish, short, third joint very convex above, not longer than the second ; arista black, stout, short ; thorax indistinctly striped, with numerous long bristles on each side ; sides, scutellum and pectus tawny ; abdomen reddish tawny, with a black stripe and with two dorsal triangular cinereous spots, armed with black spines, which are mostly towards the tip ; legs tawny ; wings grey, tawny at the base ; veins black, tawny at the base and along the costa, præbrachial vein forming an acute angle at its flexure, near which it is curved inward and is straight from thence to its tip, which joins the costal at far in front of the tip of the wing ; discal transverse vein straight, parted by less than its length from the border and by little more than half its length from the flexure of the præbrachial ; alulæ slightly greyish, with tawny borders.

Length of the body 6 lines ; of the wings 12 lines.

New South Wales.

Genus EURIGASTER, Macq.

Eurigaster cuprescens.

Fœm.—Nigra, lata, capite aurato, frontalibus atris, oculis pubescentibus, palpis fulvis, antennis basi rufis, thorace vittis quatuor scutelloque subcupreis, lateribus subauratis, pectore nigro-cinereo, abdomine brevi-obconico subcupreo, fasciis nigris, alis cinereis basi et apud costam fuscescentibus, alulis luridis.

Female.—Black, broad ; head with pale gilded tomentum, frontalia deep black, widening towards the antennæ, with bristles along each side ; facialia without bristles, except by the epistoma, which is slightly prominent ; eyes pubescent ; palpi short, tawny ; antennæ red towards the base, not reaching the epistoma ; third joint linear, about four times the length of the second arista, stout for one-fourth of the length, very much longer than the

third joint; thorax with four stripes of slightly cupreous tomentum, sides slightly gilded; scutellum slightly cupreous; pectus blackish cinereous; abdomen short, obconical, slightly cupreous above, with a black band on the hind border of each segment, tip somewhat bristly; wings grey, brownish at the base and along most of the costa; veins black, præbrachial vein forming a very obtuse angle at its flexure, very slightly curved from thence to its tip, which joins the costal vein at some distance in front of the tip of the wing; discal transverse vein curved inward near its hind end, parted from the border by a little less than its own length, and from the flexure of the præbrachial by a little more than its own length; alulæ lurid.

Length of the body 5 lines; of the wings 10 lines.

Hindostan.

~~Mac. Austral.~~ *Eurigaster Tasmaniæ.*

Fœm:—Nigra, robusta, capite aurato-testaceo subtus tumido, frontalibus luteis, facialibus setosis, oculis pubescentibus, antennis basi rufescensibus, thorace cinereo lineis quatuor nigris, scutello ferrugineo, abdomine rufescente-nigro, apice albido, alis subcinereis basi testaceis, alulis albis.

Female.—Black, stout; head testaceous, tumid beneath, with gilded tomentum; frontalia dull luteous, widening towards the antennæ, the bristles descending to one-third of the length of the face; facialia with bristles along the whole length; epistoma very prominent; eyes pubescent; antennæ black, reddish at the base, extending to the epistoma; third joint linear, six times the length of the second; arista stout to its tip, rather shorter than the third joint; thorax with cinereous tomentum, which is interrupted by four slender black lines; scutellum ferruginous; abdomen reddish black, shining, pilose, and with several bristles, whitish and shining at the tip; wings slightly greyish, testaceous at the base; veins black; præbrachial vein forming an obtuse angle at its flexure, very slightly curved inward from thence to its tip, which joins the costal vein at some distance in front of the tip of the wing; discal transverse vein hardly undulating, parted by little more than half its length from the border, and by much less than its length from the flexure of the præbrachial; alulæ white.

Length of the body $4\frac{1}{2}$ lines; of the wings 8 lines.

Tasmania.

Eurigaster? languida.

Fœm.—Nigra, robusta, cinereo-tomentosa, capite albo, frontalibus atris, oculis nudis, palpis fulvis, antennis piceis, thorace vittis quatuor nigris, scutello fulvo, abdomine ovato maculis duabus lateralibus fulvis, alis cinereis, alulis albidis.

Female.—Black, stout, with cinereous tomentum, beset with numerous bristles; vertex with a longer bristle on each side; head with white tomentum; frontalia deep black, linear, with two rows of bristles which extend to about one-third of the length of the face; facialia without bristles; epistoma not prominent; eyes bare; palpi tawny; antennæ piceous, not reaching to the epistoma; third joint linear, nearly thrice the length of the second; arista stout for about one-third of its length, much longer than the third joint; thorax with four black stripes; scutellum tawny; abdomen oval, a little longer than the thorax, with a tawny spot on each side of the second segment, and with two stout spines on its hind border, several stout spines towards the tip; wings grey; veins black; præbrachial vein forming a right angle at its flexure, curved from thence to its tip, which joins the costal at far in front of the tip of the wing; discal transverse vein almost straight, parted by less than its length from the border and from the flexure of the præbrachial; alulæ whitish.

Length of the body 4 lines; of the wings 7 lines.

Hindostan.

Genus *MASICERA*, Macq.*Masicera longiuscula.*

Mas.—Nigra, capite albo subtus cano-piloso, frontalibus atris, oculis pubescentibus, palpis apice testaceis, thorace cano lineis quatuor nigris, abdomine elongato obconico, maculis lateralibus trigonis canis, alis subcinereis, alulis albis.

Male.—Black; head with white tomentum, clothed behind and beneath with hoary hairs; frontalia deep black, widening in front; facialia with bristles along the whole length, besides a few bristles which extend from each side of the frontalia; epistoma not prominent; eyes pubescent; palpi testaceous towards the tips; antennæ wanting; thorax hoary, with four black lines; abdomen elongate, obconical, much longer than the thorax, setose towards the tip, with large triangular spots of hoary tomentum on each side; wings slightly greyish; veins black; præbrachial vein

forming a nearly right angle at its flexure, near which it is slightly inclined inward, and is thence straight to its tip, which is near the tip of the cubital vein; discal transverse vein hardly undulating; parted by little more than half its length from the border, and by less than its length from the flexure of the præbrachial; alulæ white.

Length of the body 6 lines; of the wings 10 lines.

South America.

Masicera albescens.

Mas.—Nigra, cano-tomentosa, capite argenteo, frontalibus atris, palpis testaceis, oculis nudis, antennis basi rufescentibus, thorace vittis quatuor nigricantibus, abdomine obconico sub-tessellato lateribus ferrugineis, alis subcinereis, venis testaceis, alulis albis.

Male.—Black, with hoary tomentum; head with silvery white tomentum, clothed behind with whitish hairs; frontalia deep black, very slightly widening towards the antennæ; bristles descending from the front to nearly half the length of the face; facialia with a few bristles on each side towards the epistoma, which is not prominent; peristoma and palpi testaceous; eyes bare; antennæ reddish towards the base, almost reaching the epistoma; third joint linear, full four times the length of the second; arista slender, very much longer than the third joint; thorax with four indistinct blackish stripes; abdomen obconical, slightly tessellated with a few black spines towards the tip; sides ferruginous; wings greyish; veins testaceous; præbrachial vein forming an obtuse angle at its flexure, slightly curved inward from thence to its tip, which joins the costal at some distance in front of the tip of the wing; discal transverse vein undulating, parted by a little more than half its length from the border and from the flexure of the præbrachial; alulæ white.

Length of the body 4½ lines; of the wings 8 lines.

Hindostan.

Masicera inclinans.

Fœm.—Nigra, gracilis, cinereo-tomentosa, capite albo subtus albo-tomentoso, frontalibus atris, oculis nudis, thorace vittis quatuor nigris, abdomine longi-obconico fasciis tribus latis apiceque nigris, pedibus longiusculis, alis fuscis longiusculis sat angustis, apice margineque interiore cinereis, alulis albidis.

Female.—Black, slender, beset with long bristles, with cinereous tomentum; head white in front, behind, and beneath, clothed with white hairs beneath; frontalia deep black, widening towards the face, with two rows of bristles, which extend to one-third of the length of the face; facialia without bristles; epistoma not prominent; eyes bare; antennæ extending to the epistoma; third joint linear, slender, about four times longer than the second; arista slender, very much longer than the third joint; thorax with four black stripes; abdomen elongate-obconical, much longer than the thorax, with three broad black bands, which are dilated in front; tip black, shining; legs rather long and slender; wings brown, rather long and narrow, grey towards the tips and along the interior border; veins black; præbrachial vein forming an extremely obtuse angle at its flexure, from whence it is almost straight to its tip, which joins the costal at a little in front of the tip of the wing and very near the cubital; the latter is slightly curved, parted by a little less than its length from the flexure of the præbrachial, and by less than its length from the border; alulae whitish.

Length of the body $3\frac{1}{2}$ lines; of the wings 8 lines.

South America.

Genus *TRIXA*, Meig.

Trixa? *sejuncta*.

Fœm.—Nigra, setosa, capite subitus cano, frontalibus striatis, facie angusta subretracta, facialibus setosis, antennis rufescens, articulo 3º piceo aristâ nigrâ crassâ pubescente, thorace vix vittato, abdomen longi-ovato tessellato, tibiis ferrugineis, alis cinereis, venis fulvis apice nigris, alulis albidis.

Female.—Black, setose; head hoary beneath; frontalia striated, linear, with a row of bristles along each side; face narrow, slightly retracted; facialia with bristles along two-thirds of the length from the epistoma, which is not prominent; eyes bare; proboscis ferruginous; antennæ reddish; third joint piceous, elongate-obconical, not longer than the second; arista black, stout, pubescent, rather longer than the third joint; thorax indistinctly striped; abdomen elongate-oval, tessellated, spinose; tibiæ ferruginous; wings grey; veins tawny, black towards the tips; præbrachial vein emitting a rather long branch and forming an obtuse angle at its flexure, slightly curved between that

and its tip, which ends at rather far in front of the tip of the wing ; discal transverse vein slightly undulating, parted by less than its length from the border and by little more than half its length from the flexure of the præbrachial ; alulæ whitish.

Length of the body 6 lines ; of the wings 11 lines.

Cape.

Genus GONIA, Meig.

Gonia œstroïdes.

Fœm.—Nigra, capite testaceo albido-tomentoso, frontalibus pallidè luteis, antennis nigris, articulo 2º rufescente, thorace cinereo subvittato, callis humeralibus scutelloque fulvis, abdome rufescente, vitta dorsali nigra, alis limpidis, venis testaceis apice nigris, alulis albis.

Female.—Black ; head testaceous, with shining whitish tomentum ; frontalia pale luteous, linear, with four rows of bristles along each side ; facialia with bristles along more than half the length from the epistoma, which is slightly prominent ; antennæ black ; second joint reddish ; third with hoary tomentum, reaching the epistoma ; thorax with cinereous tomentum, indistinctly striped ; humeral calli and scutellum tawny ; abdomen reddish, with a black dorsal stripe ; wings limpid ; veins testaceous, black towards the tips ; præbrachial vein hardly curved inward between its flexure and its tip ; discal transverse vein slightly undulating, parted by more than its length from the border and by more than half its length from the flexure of the præbrachial ; alulæ white.

Length of the body 5 lines ; of the wings 9 lines.

Hindostan.

Sub-fam. 3. DEXIDES.

SYNOPSIS.

* Proboscis brevis.

† Oviductus non elongatus.

‡ Abdomen non petiolatum.

§ Venæ præbrachialis et costalis conjunctæ.

× Corpus latissimum.

→ Corpus metallicum. *Rutilia*, Desv.

→ → Corpus non aut ex parte metallicum. *Diaphania*, Macq.

- × × Corpus latiusculum.
- Antennæ non longæ. *Chitogaster*, Macq.
- → Antennæ longæ. *Platytripes*, Macq.
- × × × Corpus angustum aut vix latum.
- Facies non sulcata.
- ++ Arista plumosa.
- ∞∞ Antennarum articulus 3^{us}, 2^o quadruplo longior. *Scoti-
ptera*, Macq.
- ∞∞∞ Antennarum articulus 3^{us}, 2^o duplo aut triplo longior. *Dexia*, Meig.
- ++++ Arista nuda aut tomentosa.
- ∞ Facies valde obliqua; antennæ brevissimæ.
- Abdomen ovatum. *Megaprosopus*, Macq.
- Abdomen cylindricum. *Microphthalma*, Macq.
- ∞∞ Facies sat obliqua. *Gnadochæta*, Macq.
- ∞∞∞ Facies non obliqua; antennæ sat longæ.
- Corpus non metallicum. *Gymnostylia*, Macq.
- Corpus metallicum. *Graphostylum*, Macq.
- → Facies sulcata. *Senostoma*, Macq.
- § § Venæ præbrachialis et cubitalis conjunctæ. *Dinera*, Desv.
- †† Abdomen petiolatum, clavatum. *Cordyligaster*, Macq.
- †† Oviductus elongatus. *Trichodura*, Macq.
- * * Proboscis elongata. *Prosena*, St. Farg.

Microtropeza, Macq. (type, *Musca sinuata*, Donov.), may be united to *Rutilia*, and also *Ptilostylum*, Macq., of which genus *P. albomaculatum*, Macq., seems to be identical with *M. lconina*, Fabr.

Genus DEXIA, Meig.

Dexia filipes.

Mas.—Fusca, gracilis, capite testaceo albo-tomentoso, palpis subclavatis longiusculis, thorace cano, pectore scutello abdomeque testaceis, apice nigro albo-tomentoso, pedibus testaceis perlóngis, femoribus testaceis, alis cinereis apud costam subfuscantibus, alulis subtestaceis.

Male.—Brown, slender, with a few black bristles; head, proboscis, palpi and antennæ testaceous; head with shining white tomentum; facialia without bristles; epistoma not prominent; eyes bare; palpi subclavate, rather long and slender; third joint of the antennæ linear, slender, almost reaching the epistoma,

about four times the length of the second ; arista black, plumose ; thorax with hoary tomentum ; pectus and scutellum dull testaceous ; abdomen testaceous, a little longer and more slender than the thorax ; tip black, with white tomentum ; legs black, slender, very long ; femora, except the tips, knees and coxae, testaceous ; wings grey, slightly brownish along the costa : veins black, testaceous towards the base ; præbrachial vein forming an extremely obtuse angle at its flexure, from whence it is very slightly curved to its tip, which ends at very little in front of the tip of the wing ; discal transverse vein much curved inward near its base, very slightly curved outward from thence to its tip, parted by much less than its length from the border, and by a little more than its length from the flexure of the præbrachial ; alulae with a slight testaceous tinge.

Length of the body 4 lines ; of the wings 7 lines.

Valley of the Amazon.

Dexia extrema.

Mas.—*Nigra*, subaurata, capite pectoreque albidis, palpis antennisque testaceis, abdomine testaceo, apice nigro nitente, pedibus sat longis, coxis femoribusque testaceis, alis cinereis, basi costaque subtestaceis, costæ apice venisque fusco-nebulosis, venis testaceis apice nigris, alulis albidis testaceo-marginatis.

Male.—Black, with slightly gilded tomentum and a few black bristles ; head whitish in front and beneath ; facialia without bristles ; epistoma not prominent ; eyes bare ; palpi testaceous ; antennæ testaceous ; third joint full twice the length of the second, not extending beyond half the length of the face ; pectus whitish ; abdomen testaceous, elongate-obconical, much longer than the thorax, black and shining and with a few black spines at the tip ; legs slender, moderately long ; coxae and femora testaceous ; wings grey, with a slight testaceous tinge at the base and along part of the costa, clouded with brown towards the tip of the costa and along the veins ; veins testaceous, black towards the tips ; præbrachial vein forming a rounded and extremely oblique angle at its flexure, straight from thence to its tip, which ends at some little distance in front of the tip of the wing ; discal transverse vein straight, parted by little more than half its length from the border and by rather less than its length from the flexure of the præbrachial ; alulae whitish, with broad testaceous borders.

Length of the body 4½ lines ; of the wings 8 lines.

Valley of the Amazon.

Dexia? albicans. = Tricharaea Theron

Mas.—Cano-tomentosa, capite subalbo, frontalibus ferrugineis, palpis testaceis, antennis nigris, articulo 2° testaceo, thorace abdomineque cinereo-trivittatis, abdomine subfusciformi, pedibus robustis, alis vix subcinereis, venis testaceis apice nigris, alulis albis.

Male.—Thickly covered with hoary tomentum; head almost white, rather prominent; frontalia ferruginous, linear; facialia without bristles; epistoma not prominent; eyes remote; palpi testaceous; antennæ black, third joint not reaching the epistoma, more than twice the length of the second, which is testaceous; thorax and abdomen with three slight cinereous stripes; abdomen subfusciform, longer than the thorax; legs stout; wings hardly greyish; veins testaceous, black towards the tips; pæbrachial vein forming an almost right angle at its flexure, near which it is curved inward, straight from thence to its tip, which ends at somewhat in front of the tip of the wing; discal transverse vein nearly straight, parted by much less than its length from the border and from the flexure of the pæbrachial; alulæ white.

Length of the body 4 lines; of the wings 7 lines.

Valley of the Amazon.

This species may perhaps form a new genus on account of the shape of its head and of its thick legs.

Dexia spinosa.

Mas.—Nigra, cinereo-tomentosa, capite testaceo albido tomentoso antice subproducto et subcompresso, frontalibus ferrugineis, palpis antennisque testaceis, thorace vittis tribus nigris, pectore cano, abdomine testaceo oblanceolato, vitta dorsali apiceque nigris, pedibus perlóngis, femoribus testaceis, alis fusco-cinereis, venis nigris, alulis cinereis testaceo-marginatis.

Male.—Black, with cinereous tomentum; head with whitish tomentum, testaceous in front and beneath, slightly prominent and compressed in front of the eyes; frontalia ferruginous, widening in front, with a thick row of bristles on each side; face with a furrow along each side; facialia without bristles; epistoma not prominent; eyes bare; proboscis rather long; palpi testaceous; antennæ testaceous; third joint not near reaching the epistoma, full twice the length of the second; thorax with three black stripes; pectus hoary; abdomen testaceous, oblanceolate, much longer than the thorax, with black spines, which are mostly towards the tip; dorsal stripe and tip black;

legs rather slender, very long ; femora testaceous, black towards the tips ; wings brownish grey ; veins black ; *præbrachial* vein forming a somewhat rounded and very obtuse angle at its flexure, straight from thence to its tip, which ends at a little in front of the tip of the wing ; discal transverse vein slightly undulating, parted by half its length from the border and by less than its length from the flexure of the *præbrachial* ; *alulæ* cinereous, with testaceous borders.

Length of the body $5\frac{1}{2}$ lines ; of the wings 9 lines.

Port Natal.

Genus *SENOSTOMA*, Macq.

Senostoma ? punctum.

Fœm.—Nigrum, validum, cano-tomentosum, capite ferrugineo subtus albido, frontalibus nigricantibus, antennis rufescensibus, articulo 3° nigro, thorace quadriplagiato, abdome obconico subtessellato, pedibus longiusculis, alis subcinereis nigro quinque punctatis, *alulæ* albis.

Female.—Black, stout, with hoary tomentum ; head ferruginous, and with whitish tomentum beneath, where it is clothed with white hairs ; frontalia blackish, widening much in front ; facialia without bristles ; epistoma not prominent ; eyes bare ; antennæ reddish ; third joint black, a little longer than the second, hardly extending beyond half the length of the face ; arista black, plumeous ; thorax with four very slight stripes ; abdomen obconical, slightly tessellated, not longer than the thorax ; legs rather long and slender ; wings greyish, with four black points near the base ; veins black ; veinlet between the cubital and the *præbrachial* veins clouded with black ; *præbrachial* vein forming a right angle at its flexure, near which it is curved inward, almost straight from thence to its tip, which ends at somewhat in front of the tip of the wing ; discal transverse vein rather deeply undulating, parted by half its length from the border and by very much less than its length from the flexure of the *præbrachial* ; *alulæ* white, large.

Length of the body $4\frac{3}{4}$ lines ; of the wings 9 lines.

Australia and New South Wales.

Genus *CORDYLIGASTER*, Macq.

Cordyligaster tipuliformis.

Fœm.—Nigra, pergracilis, cinereo-tomentosa, capite albido, frontalibus atris, palpis antennisque fulvis, thoracis vittis tribus

abbreviatis subauratis, abdomine ferrugineo compresso longissimo basi petiolato, fasciis duabus testaceis, pedibus testaceis longis, femoribus nigro-fasciatis, coxis posticis et tarsis anticis nigris, alis cinereis longis angustis, costa venisque lurido-marginatis, alulis albidis minimis.

Female.—Black, very slender, with pale shining cinereous tomentum; head whitish in front and beneath; frontalia deep black, widening in front; face with a slight middle keel; facialia without bristles; epistoma not prominent; eyes bare; palpi and antennæ tawny; disk of the thorax and that of scutellum black and shining, the former with three short pale gilded stripes in front, abdomen ferruginous, compressed, petiolated towards the base, more than thrice the length of the thorax; third and fourth segments testaceous at the base; legs testaceous, long, slender; femora with black bands; hind coxae and fore tarsi black; wings grey, long and narrow, lurid along the costa and along the veins, which are ferruginous; discal transverse vein emitting a very short branch and forming a right angle at its flexure, straight from thence to its tip, which ends at somewhat in front of the tip of the wing; discal transverse vein very slightly undulating, parted by much less than half its length from the border, and by about its length from the flexure of the præbrachial; alulæ whitish, very small; halteres testaceous.

Length of the body $7\frac{1}{2}$ lines; of the wings 11 lines.

South America.

Sub-fam. 4. SARCOPHAGIDÆ.

SYNOPSIS.

- * Vena præbrachialis extus flexuram arcuata.
- † Corpus latum; tibiæ posticæ arcuatæ. *Phrißopoda*, Macq.
- †† Corpus vix latum; tibiæ posticæ rectæ aut subarcuatæ.
- ‡ Corpus non metallicum.
- § Antennarum articulus 3^{us}, 2^o triplo longior.
- ✗ Abdominis segmentum 2^{um} margine setoso. *Sarcophaga*, Meig.
- ✗✗ Abdominis segmentum 2^{um} margine non setoso.
- Antennæ non breves. *Agria*, Desv.
- + Antennæ breves. *Microcerella*, Macq.
- §§ Antennarum articulus 3^{us}, 2^o quadruplo longior. *Diaugia*, Perty.
- ‡‡ Corpus metallicum, micans.
- § Caput non depresso.

- × Tarsi non arcuati. *Cynomyia*, Desv.
- × × Tarsi arcuati. *Toxotarsus*, Macq.
- § § Caput depresso. *Catapicephala*, Macq.
- * * Vena præbrachialis extus flexuram recta. *Onesia*, Desv.

Genus **SARCOPHAGA**, Meig.

Sarcophaga decadens.

Mas.—Nigra, capite subaurato subitus cano, facie albida, frontalibus atris, thoracis vittis abdominisque tessellis cinereis subauratis, abdominis apice rufescente, alis subcinereis, venis nigris, alulis albis.

Male.—Black; head with pale gilded tomentum; hoary, and with hoary hairs beneath; face whitish; frontalia deep black, widening in front; the four stripes of the thorax, the border of the scutellum, and the tessellated marks on the abdomen, cinereous, very slightly gilded; tip of the abdomen ferruginous red; wings greyish; veins black; præbrachial vein emitting the usual branch, and forming a right angle at its flexure, near which it is curved inward, and is straight from thence to its tip; discal transverse vein straight, parted by nearly its length from the border, and by little more than half its length from the flexure of the præbrachial; alulæ white.

Length of the body 4 lines; of the wings $7\frac{1}{2}$ lines.

Colombia.

Sarcophaga subsericans.

Mas.—Nigra, capite cano, facie albida, frontalibus atris, thoracis vittis quatuor abdominisque maculis intermediis albidis, abdominis maculis lateralibus subauratis, apice fulvo testaceo tomentoso, alis subcinereis, venis nigris, alulis subcinereis albo-marginatis.

Male.—Black; head with hoary tomentum, white and shining in front; frontalia deep black, widening in front, the four stripes of the thorax, the borders of the scutellum and the two dorsal rows of abdominal spots, whitish; the lateral abdominal spots slightly gilded; tip of the abdomen tawny, with pale testaceous tomentum; wings greyish; veins black; præbrachial vein like that of the preceding species; discal transverse vein curved inward near its base, parted by much less than its length from the

border, and from the flexure of the præbrachial; alulæ slightly cinereous, with white borders.

Length of the body $3\frac{1}{2}$ lines; of the wings $6\frac{1}{2}$ lines.
South America.

Sarcophaga? punctipennis.

Fœm.—Nigra, cinereo-tomentosa, capite antice argenteo, thorace vittis quatuor nigris, abdomine æneo-nigro, fasciis interruptis albis, alis cinereis nigro-quadripunctatis, alulis albis.

Female.—Black, with cinereous tomentum; head silvery white in front; thorax with four black stripes; abdomen æneous black, somewhat short and depressed, with an interrupted white band on the fore border of each segment; wings grey; veins black; a black dot on the veinlet between the cubital and the præbrachial, one at each end of the discal transverse vein, and one on the flexure of the præbrachial; præbrachial vein forming an acute but rounded angle at its flexure, near which it is very much curved, almost straight from thence to the tip, which ends at very far in front of the tip of the wing; discal transverse vein curved near its base, and forming an angle near its tip, parted by much more than its length from the border and by much less than its length from the flexure of the præbrachial; alulæ white.

Length of the body $3\frac{1}{2}$ lines; of the wings 7 lines.
Colombia.

This species differs much from the other *Sarcophagæ*, but the generic characters cannot easily be ascertained in the specimen described.

Sarcophaga injuncta.

Fœm.—Nigra, capite aurato, frontalibus atris, facie cinereâ, thorace vittis duabus dorsalibus canis duabusque lateralibus auratis, pectore vittis duabus auratis, abdomine cyaneo-nigro tessellis canis, apice fulvo, alis cinereis, venis nigris, alulis albis.

Female—Black; head with deep gilded tomentum; frontalia deep black, a little narrower in front; face cinereous; thorax with two hoary dorsal stripes, and with a gilded stripe on each side; pectus with two gilded stripes; abdomen bluish black, oval, not longer than the thorax, tessellated as usual with hoary spots, but less distinctly than in many species; tip tawny; wings grey; veins black; præbrachial vein forming a right angle at its flexure, near which it is much curved inward, and is thence straight to its tip; discal transverse vein straight, except a slight curve near its base,

parted by much less than its length from the border, and by hardly more than half its length from the flexure of the præbrachial; alulæ white.

Length of the body 4 lines; of the wings 8 lines.
Brazil.

Genus CYNOMYIA, Desv.

Cynomyia auriceps.

Fœm.—Læte viridis, capite aurato antice testaceo, frontalibus nigris, antennis fulvis, thorace vittis quatuor nigris, pedibus nigris dense pilosis, alis cinereis basi obscure fuscis, venis fusco-limbatis, alulis cinereis.

Female.—Bright green; head gilded, testaceous in front; frontalia black, linear; epistoma rather prominent; antennæ tawny; arista black; thorax with four black stripes; legs black, thickly pilose; wings grey, dark brown at the base, brown along the borders of the veins; veins black; præbrachial vein forming a right and somewhat rounded angle at its flexure, near which it is very slightly curved inward, straight from thence to its end, which is at a little in front of the tip of the wing; discal transverse vein hardly undulating, parted by much less than half its length from the border, and by hardly more than half its length from the flexure of the præbrachial; alulæ cinereous.

Length of the body 6 lines; of the wings 14 lines.
Quito.

Sub-fam. 5. MUSCIDÆ.

SYNOPSIS.

- * Proboscis longa, gracilis.
- † Palpi proboscide non breviores. *Glossina*, Wied.
- †† Palpi proboscide breviores.
- ‡ Arista plumosa.
- § Arista supra plumosa. *Stomoxyx*, Geoff.
- §§ Arista supra subtusque plumosa. *Pachymia*, Macq.
- †† Arista nuda. *Gigamyia*, Macq.
- ** Proboscis brevis.
- † Corpus angustum; pedes longi. *Apatomyia*, Macq.
- †† Corpus non angustum; pedes non longi.
- ‡ Facies carinata.

- § Arista pilis longis.
- ✗ Epistoma prominens.
- ⊕ Corpus latum. *Amenia*, Desv.
- ++ Corpus elongatum. *Silbomyia*, Macq.
- ✗✗ Epistoma non prominens. *Bengalia*, Desv.
- §§ Arista pilis abbreviatis.
 - ✗ Vena præbrachialis post flexuram recta. *Diaphania*, Macq.
 - ✗✗ Vena præbrachialis post flexuram arcuata. *Amphibolia*, Macq.
- ⊕⊕ Facies non carinata.
- § Frons elongata.
 - ✗ Epistoma valde prominens.
 - ⊕ Arista supra plumosa. *Idia*, Meig.
- ++ Arista tomentosa. *Rhynchomyia*, Desv.
 - ✗✗ Epistoma non valde prominens.
 - ⊕ Vena præbrachialis post flexuram valde retracta.
 - ++ Tibiæ posticæ ciliatæ. *Blepharicnema*, Macq.
- ++++ Tibiæ posticæ non ciliatæ.
 - ∞ Thorax non tomentosus.
 - O Antennarum articulus 3^{us} 2^o quadruplo longior.
 - Epistoma vix prominens. *Calliphora*, Desv.
 - = Epistoma sat prominens.
 - ÷ Abdomen crassum. *Ochromyia*, Macq.
- ÷÷ Abdomen depressum.
 - ÷÷ Vena præbrachialis concava. *Lucilia*, Desv.
 - ÷÷ Vena præbrachialis convexa. *Pyrellia*, Desv.
- OO Antennarum articulus 3^{us} 2^o triplo longior. *Musca*, Linn.
- ∞∞ Thorax tomentosus. *Pollenia*, Macq.
- ++ Venæ præbrachialis post flexuram subretracta.
 - ++ Corpus crassum. *Mesembrina*, Meig.
 - ++ Corpus non crassum. *Morellia*, Desv.
- §§ Frons transversa. *Achias*, Fabr.

Genus *PACHYMYIA*, Macq.

Pachymyia jactans.

Fæm.—Nigra, cano-tomentosa, capite albo, antice testaceo, frontalibus pallidè luteis, antennis testaceis, abdominis lateribus basi rufo-fulvis, pedibus fulvis longiusculis, tarsis nigris, alis subcinereis, alulis albis, halteribus testaceis.

Female.—Black, with hoary tomentum; head with white shining tomentum, testaceous in front and beneath; frontalia linear, pale

luteous, with black bristles along each side; facialia without bristles; peristoma bordered with bristles; eyes bare; proboscis black, about three-fourths of the length of the body, tawny towards the base; antennæ testaceous; abdomen oval, reddish tawny on each side towards the base; legs tawny, rather long; tarsi black; wings greyish; veins black, testaceous towards the base, præbrachial vein forming an almost right angle at its flexure, hardly curved from thence to its tip, which ends at somewhat in front of the tip of the wing; discal transverse vein distinctly undulating, parted by more than half its length from the border, and by less than its length from the flexure of the præbrachial; alulæ white; halteres testaceous.

Length of the body 5 lines; of the wings 9 lines.

Genus BENGALIA, Desv.

Bengalia depressa.

Fœm.—Obscurè cervina, capite pectoreque testaceis albido-to-mentosis, antennis piceis, abdomine fulvo, segmentorum mar-ginibus posticis nigris, pedibus testaceis, tarsis apice nigris, alis cinereis basi et apud venas sub-testaceis, alulis cinereis testaceo-marginatis.

Female.—Dull fawn colour; head testaceous and with whitish tomentum in front and beneath; proboscis tawny; palpi testaceous; antennæ piceous; pectus testaceous, with whitish tomentum; abdomen tawny, partly covered with cinereous tomentum; hind borders of the segments black; legs testaceous; tips of the tarsi black; wings grey; veins tawny; præbrachial vein much rounded at its flexure, hardly curved inward, with a very slight testaceous tinge at the base and along the veins from thence to its tip; discal transverse vein hardly undulating, parted by less than half its length from the border, and by full half its length from the flexure of the præbrachial; alulæ cinereous, with testaceous borders.

Length of the body $4\frac{1}{2}$ —5 lines; of the wings 8—9 lines.

Port Natal.

Genus IDIA, Meig.

Idia extensa.

Mas.—Nigra, capite anticè nitente, lateribus subtus testaceo-to-mentosis, thorace vittis quatuor latis canis, pectore testaceo,

abdomine pedibusque fulvis, tibiis posticis apice genibusque nigris, tarsis nigris basi testaceis, alis cinereis apud costam fuscis, alulis subtestaceis, halteribus testaceis.

Male.—Black; head shining in front, with testaceous tomentum on each side beneath; thorax with four broad hoary stripes; pectus testaceous; abdomen tawny, elliptical, a little longer than the thorax; legs tawny; knees and tips of the hind tibiæ black; tarsi black, testaceous at the base; wings grey, brown along the costa; veins black; præbrachial vein forming a curve at its flexure; discal transverse vein undulating, parted by half its length from the border, and by less than its length from the præbrachial; alulæ slightly testaceous; halteres testaceous.

Length of the body $3\frac{1}{2}$ lines; of the wings 6 lines.

Port Natal.

Idia ? simplex.

Fœm.—Aureo-viridis, albido-tomentosa, capite testaceo, antennis luteis, arista nigra, thorace quadriplagiato, abdomine cupreum lineâ dorsali, tibiis fulvis, tarsis piceis, alis sub-cinereis, costa apicem versus fuscescente, alulis albidis.

Female.—Golden green, with whitish tomentum; head pale testaceous, hardly prominent, whitish beneath; proboscis black; palpi pale testaceous; antennæ pale luteous; arista black, plumeous; thorax with four stripes; abdomen cupreous, depressed, with a dorsal line; tibiæ tawny; tarsi piceous; wings very slightly greyish, brownish along the costa towards the tip; veins black, testaceous towards the base; præbrachial vein forming a rather obtuse angle at its flexure, nearly straight from thence to its tip, which almost joins the cubital vein; discal transverse vein slightly undulating, parted by much less than its length from the border, and by a little less than its length from the flexure of the præbrachial; alulæ whitish.

Length of the body $3\frac{1}{2}$ lines; of the wings 6 lines.

Hindostan.

In this species the characters of the genus are much modified.

Idia ? varia.

Fœm.—Viridis, capite testaceo maculis sex nigris, frontalibus fulvis, proboscide nigro, antennis piceis, abdomine testaceo, vitta fasciisque nigris, pedibus fulvis, alis cinereis, venis nigris basi fulvis, alulis subtestaceis.

Female.—Green, shining; head testaceous, with two black dots

on each side in front; frontalia tawny, widened in front and behind, where they include a lanceolate triangle; epistoma prominent, with a black streak on each side; proboscis black; antennæ piceous; abdomen testaceous, with a black stripe and with black bands; first, second and third bands widely interrupted, fifth occupying almost the whole segment; legs tawny; wings grey; veins black, tawny towards the base; præbrachial vein forming a very oblique and somewhat rounded vein at its flexure, nearly straight from thence to its tip; discal transverse vein much curved inward near its base, hardly curved outwards towards its tip, parted by rather more than half its length from the border and from the flexure of the præbrachial; alulæ slightly testaceous.

Length of the body $3\frac{1}{2}$ lines; of the wings 7 lines.

Cape.

Genus LUCILIA, Desv.

Lucilia pinguis.

Fœm.—Purpurea, capite nigro anticè rufescente, antennis rufescentibus, thorace ex parte cyaneo, pedibus nigris, tibiis ferrugineis, alis subcinereis, venis nigris, alulis cinereis.

Female.—Purple; head black, reddish in front; antennæ reddish; arista black; thorax partly blue; legs black; tibiæ ferruginous; wings greyish; veins black; præbrachial vein forming a right slightly rounded angle at its flexure, slightly curved inward from thence to its tip; discal transverse vein very slightly undulating, parted by nearly half its length from the border, and by full half its length from the flexure of the præbrachial; alulæ cinereous.

Length of the body $3\frac{1}{2}$ lines; of the wings 6 lines.

Hindostan.

Lucilia basifera.

Mas.—Viridis, capite nigro, thorace vittis duabus latis nigris, lateribus cyaneis, scutello abdomineque purpureis, hujus dimidio apicali viridi, illius margine cyaneo, pedibus nigris, alis subcinereis basi nigricantibus.

Male.—Green; head black; thorax with two broad black stripes, blue on each side; scutellum purple, with a blue border; abdomen purple; apical half green, with hoary hairs; hind border of the third segment purple; legs black; wing greyish, blackish

towards the base; veins black; præbrachial vein forming a right somewhat rounded angle at its flexure, near which it is much curved inward and is thence straight to its tip; discal transverse vein slightly undulating, parted by less than half its length from the border and from the flexure of the præbrachial; alulæ grey.

Length of the body $3\frac{1}{2}$ lines; of the wings 7 lines.

Genus PYRELLIA, Desv.

Pyrellia facilis.

Mas.—Purpurea, capite antico refescente, facie cinereâ, palpis antennisque fulvis, thorace vittis tribus latis canis, scutello cyaneo, pedibus nigris, alis cinereis basi obscurioribus, venis nigris.

Male.—Purple; head reddish in front; face cinereous; palpi and antennæ tawny; arista black; thorax with three broad hoary stripes; scutellum mostly blue; legs black; wings grey, darker at the base; veins black, præbrachial vein forming a slight curve at its flexure, very slightly curved inward near its end, which is at the tip of the wing; discal transverse vein nearly straight, parted by much less than its length from the border and by little less than its length from the flexure of the præbrachial; alulæ cinereous.

Length of the body $3\frac{1}{2}$ lines; of the wings 7 lines.

South America.

Pyrellia torpida.

Fæm.—Cyaneo-viridis, longiuscula, capite nigro anticè albo, antennis piceis, pedibus nigris, tibiis ferrugineis, alis vix cinerascentibus, venis nigris, alulis albidis.

Female.—Bright bluish green; head black, shining white in front; antennæ piceous; thorax minutely punctured, rather long and narrow; legs black; tibiæ ferruginous; wing hardly greyish; veins black; præbrachial vein much curved at its flexure, almost straight from thence to its end, which is at a little in front of the tip of the wing; discal transverse vein very slightly undulating, parted by much less than its length from the border and by hardly less than its length from the flexure of the præbrachial; alulæ whitish.

Length of the body $3\frac{1}{2}$ lines; of the wings $6\frac{1}{2}$ lines.

Cape Coast.

Genus **MUSCA**, Linn.

Musca ruficornis.

Fœm.—Nigra, capite cinereo, peristomate ferrugineo, frontibus obscurè ferrugineis, palpis fulvis, antennis rufescensibus, abdomine nigro-viridi, alis limpidis, venis fulvis.

Female.—Black; head with cinereous tomentum; ferruginous about the peristoma; frontalia dark, ferruginous; palpi tawny; antennæ reddish; thorax with a tawny callus on each side in front; abdomen dark green, broader and shorter than the thorax; wings limpid; veins tawny, veinlet between the cubital and the præbrachial veins brown; discal transverse vein slightly undulating.

Length of the body $4\frac{1}{2}$ lines; of the wings 9 lines.

Tasmania.

Genus **MORELLIA**, Desv.

Morellia indecora.

Fœm.—Nigra cinereo-tomentosa, capite et antennarum articulo 2º ferrugineis, thorace subvittato, abdomine viridescente nigro glaucescente, alis cinereis, alulis testaciis.

Female.—Black, with slight cinereous tomentum; head ferruginous in front and beneath; second joint of the antennæ ferruginous; third extending to the epistoma, full four times the length of the second; thorax indistinctly striped; abdomen greenish black, with glaucous reflections; wings grey; veins black; præbrachial vein much curved at its flexure, almost straight from thence to its end, which is hardly in front of the tip of the wing; discal transverse vein slightly undulating, parted by much less than its length from the border, and by very little less than its length from the flexure of the præbrachial; alulæ testaceous.

Length of the body $4\frac{1}{2}$ lines; of the wings 8 lines.

New South Wales.

In the length of the third joint of the antennæ this species agrees with *Calliphora*, and not with *Morellia*.

Sub-fam. 6. ANTHOMYIDES.

SYNOPSIS.

- * Alulæ amplæ aut mediocres.
- † Abdomen ovatum latum.
- † Abdomen non breve.
- § Palpi sat longi. *Aricia*, Desv.
- §§ Palpi breves. *Brachypalpus*, Macq.
- †† Abdomen breve.
- § Pedes pilosi. *Brachygasterina*, Macq.
- §§ Pedes vix pilosi. *Microchylum*, Macq.
- †† Abdomen oblongum, non latum.
- ‡ Corpus nigrum et album. *Leucomelina*, Macq.
- ‡‡ Corpus non nigrum et album.
- § Palpi non dilatati.
- ✗ Arista plumosa. *Spilogaster*, Macq.
- ✗✗ Arista nuda aut tomentosa.
- Maris femora antica dentata. *Hydrotcea*, Desv.
- + Femora antica non dentata.
- ++ Frontis setæ breves; abdomen ovatum. *Ophyra*, Desv.
- +++- Frontis setæ elongatae; abdomen oblongum. *Limnophora*, Desv.
- §§ Palpi dilatati. *Lispe*, Meig.
- ** Alulæ parvæ.
- † Pedes non valde setosi.
- ‡ Maris frons angusta.
- § Arista plumosa. *Hylemyia*, Desv.
- §§ Arista nuda aut tomentosa.
- ✗ Maris abdomen cylindricum.
- Caput incrassatum; arista tomentosa. *Chortophila*, Macq.
- + Caput non incrassatum; abdomen angustum.
- ++ Arista nuda. *Atomogaster*, Macq.
- +++- Arista tomentosa. *Pegomyia*, Desv.
- ✗✗ Abdomen maris et foem. apice attenuatum. *Anthomyia*, Meig.
- ✗✗✗ Abdomen filiforme. *Leptomyza*, Macq.
- ‡‡ Maris frons lata.
- § Arista plumosa.
- ✗ Antennæ incumbentes. *Cœnosia*, Meig.
- ✗✗ Antennæ non incumbentes. *Schænomyza*, Haliday.
- §§ Arista nuda. *Craspedochæta*, Macq.
- †† Pedes valde setosi. *Macrochæta*, Macq.

Genus ARICIA, Desv.

Aricia ignava.

Fœm.—Nigra, cinereo-tomentosa, capite albo, scutelli margine pedibusque fulvis, abdomine ovato, tarsis nigris, alis sublurido-cinereis, venis nigris, alulis cinereis, halteribus testaceis.

Female.—Black, with cinereous tomentum ; head white in front and beneath ; scutellum with a tawny border ; abdomen oval, very little broader and longer than the thorax ; legs tawny ; tarsi black ; wings grey, with a slight lurid tinge ; veins black ; discal transverse vein very slightly curved inward, parted by more than half its length from the border, and by a little more than its length from the præbrachial transverse vein ; alulæ cinereous ; halteres testaceous.

Length of the body 3 lines ; of the wings 7 lines.

Brazil.

Aricia ? inscia.

Fœm.—Nigra, cinereo-tomentosa capite subaurato posticè albido, thorace trivittato, abdomine cyaneo basi nigro, alis limpidis, venis nigris basi fulvis, alulis albis.

Allied to *A. cœruleigaster*, Macq. *Female.*—Black, with slight cinereous tomentum ; head slightly gilded, whitish behind ; arista moderately plumose ; thorax with three indistinct black stripes ; abdomen blue, oval, not longer nor broader than the thorax ; first segment black ; wings limpid ; veins black, tawny at the base ; discal transverse vein undulating, parted by more than half its length from the border, and by very little more than its length from the præbrachial transverse vein ; alulæ white.

Length of the body 3 lines ; of the wings 7 lines.

Tasmania.

Genus HYLEMYIA, Desv.

Hylemyia fasciata.

Fœm.—Nigra, albo-tomentosa, thoracis fasciis duabus scutelloque atris, abdomine subaurato vitta fasciisque nigris, alis limpidis, venis testaceis apice nigris, alulis albis.

Female.—Nearly allied to *H. pluvialis*. Black, with white tomentum ; thorax with two deep black bands ; scutellum deep

black; abdomen with the white slightly gilded, with a black stripe, and with a black band on the fore border of each segment; wings limpid; veins testaceous, black towards the tips; discal transverse vein slightly curved inward, parted by more than half its length from the border, and by less than its length from the præbrachial transverse vein; alulæ white.

Length of the body $2\frac{1}{2}$ lines; of the wings 5 lines.

Port Natal.

Div. 2. ACALYPTERÆ.

Sub-fam. 1. HELOMYZIDES.

The exotic genera are here enumerated, with the characters which chiefly distinguish them from the most nearly allied European genera, and the same plan is used with respect to some of the following sub-families:—

1. *Thecomyia*, Perty; facies elongata.
Tetanocra, Dum.; facies non elongata.
2. *Curtonotum*, Macq.; thorax gibbosus.
Helomyza, Fall.; thorax non gibbosus.
3. *Pyryota*, Wied.; abdomen apice clavatum.
Otitis, Latr.; abdomen depresso.
4. *Dichromyia*, Desv.; pedes nudi.
Actora, Meig.; pedes villosi.
5. *Ectecephala*, Macq.; antennæ elongatæ.
Eurina, Meig.; antennæ non elongatæ.
6. *Orthostylum*, Macq.; arista recta.
Cordylura, Fall.; arista non recta.
7. *Chætura*, Macq.; tibiæ posticæ arcuatæ.
Cordylura, Fall.; tibiæ posticæ non arcuatæ.

Genus SCATOPHAGA, Meig.

Scatophaga canadensis.

Fœm.—*Cervina*, capite fulvo, subtus pallido subaurato, antennis fulvis, arista nigra subtomentosa, thorace vittis tribus fuscis, metathorace cano, abdomine cinereo apice fulvo, pedibus fulvis, alis lurido-subcinereis, venis transversis nigro-nebulosis.

Female.—Fawn colour; head tawny in front, pale and with slightly gilded tomentum beneath; antennæ tawny; arista black,

slightly tomentose; thorax with three indistinct brown stripes; metathorax hoary; abdomen cinereous, tawny at the tip; legs tawny; wings greyish, with a lurid tinge; veins black, tawny towards the base; transverse veins, especially the præbrachial one, clouded with black.

Length of the body $2\frac{1}{2}$ lines; of the wings 6 lines.
Canada.

Genus SCIOMYZA, Fall.

Sciomyza terminalis.

Fœm.—Cinerea, capite lato cervino subtus testaceo, antennis fulvis, arista nigra plumosa, thorace vittis duabus testaceis, pectore et metathorace canis, abdomine vitta nigricante, pedibus fulvis, tibiis tarsisque apice nigris, alis cinereis apud costam obscurè fuscis, fascia subapicali pallidiore.

Female.—Cinereous; head broad; fawn colour, testaceous beneath; antennæ tawny; third joint conical; arista black, plumose; thorax with a testaceous stripe on each side, pectus and metathorax hoary; abdomen with a blackish stripe; legs tawny; tips of the tibiæ and of the tarsi black; fore tarsi black, tawny at the base; wings grey, dark brown along the costa, and with a paler brown irregular abbreviated subapical band; veins black; præbrachial transverse band hardly undulating; halteres tawny.

Length of the body 3 lines; of the wings $6\frac{1}{2}$ lines.
Hindostan.

Genus HELOMYZA, Fall.

Helomyza lata.

Fœm.—Picea, valida, antennis nigris, thorace subvittato, abdome basi maculisque duabus lateralibus fulvis, pedibus nigris, alis cinereis apud costam fuscescentibus, venis nigris.

Female.—Piceous, stout; antennæ black; thorax indistinctly striped; abdomen tawny at the base and with a tawny spot on each side near the base; legs black; wings grey, brownish along the costa; veins black; præbrachial transverse vein stout; discal transverse vein nearly straight.

Length of the body $3\frac{1}{2}$ lines; of the wings 6 lines.
South America.

Helomyza robusta.

Fœm.—Fulva, valida, arista nigra plumosa, pedibus testaceis, tarsis piceis, alis luridis, apud marginem posticum subcinereis, venis fulvis.

Female.—Tawny, stout, with a few black bristles; arista black, plumose; abdomen a little paler than the thorax; legs testaceous; tarsi piceous; wings lurid, slightly greyish along the hind border; veins tawny; discal transverse vein straight.

Length of the body $2\frac{3}{4}$ lines; of the wings 5 lines.

Valley of the Amazon.

Helomyza marginalis.

Fœm.—Luteo-fulva, thorace cinereo vittis tribus fulvis, abdome fasciis nigris, femoribus tibiisque apice tarsisque nigris, alis lurido-cinereis, venis fulvis apice nigris.

Female.—Luteous tawny; thorax with cinereous tomentum, which is interrupted by three stripes; abdomen with a slender black band on the hind border of each segment; tarsi and tips of the femora and of the tibiæ black; wings grey, with a lurid tinge, which disappears along the hind border; veins tawny, black towards the tips; discal transverse vein straight.

Length of the body $3\frac{1}{4}$ lines; of the wings 6 lines.

New South Wales.

Genus DRYOMYZA.

Dryomyza cingulipes.

Fœm.—Ferrugineo-fulva, proboscide antennisque nigris, abdominis segmentis nigricanti-marginatis; femoribus, tibiisque apice nigris, femoribus tibiisque nigro-fasciatis, alis cinereis.

Female.—Ferruginous tawny; proboscis and antennæ black; abdomen shorter than the thorax, acuminate at the tip; borders of the segments blackish; femora, tibiæ and tarsi with black tips; femora and tibiæ with a black band on each; wings grey; veins black, tawny towards the base.

Length of the body 4 lines; of the wings 8 lines.

New South Wales.

Genus TETANOCERA, Dumeril.

Tetanocera lateralis.

Mas.—Picea, capite fulvo guttis duabus nigris, antennis nigris longis, aristâ plumosâ, thorace abdomineque vittis duabus lateralibus auratis, pedibus fulvis, alis cinereis, apud costam nigro-cinereis, halteribus testaceis.

Male.—Piceous; head tawny, with a black dot on each side of the vertex; peristoma produced; proboscis and antennæ black, the latter long, linear; third joint shorter than the second; arista plumose; thorax and abdomen with a gilded stripe along each side; pectus with two lateral gilded streaks; legs tawny; wings grey, blackish grey along the costa; veins black; discal transverse vein straight, upright, parted by less than its length from the border, and by more than twice its length from the præbrachial transverse vein; halteres testaceous.

Length of the body $3\frac{1}{2}$ lines; of the wings 6 lines.

Valley of the Amazon.

Genus DORYCERA, Hoffm.

Dorycera ? conspersa.

Fœm.—Cinerea, capite fulvo conico, pectoris margine abdominisque apice fulvis, pedibus fulvis, alis albidis, guttis plurimis cinereis maculaque costali nigricante, halteribus testaceis.

Female.—Cinereous; head tawny, produced and narrower in front of the eyes; front small; antennæ short; pectus tawny, with a cinereous disk; abdomen tawny at the tip; legs tawny; wings whitish, with various grey dots, and with a blackish spot on the costa just before the middle; veins black, tawny towards the base; discal transverse vein straight, upright, parted by much less than its length from the border, and by a little less than its length from the præbrachial transverse vein; halteres testaceous.

Length of the body 3 lines; of the wings 6 lines.

Colombia.

Sub-fam. 2. BORBORIDES.

Genus BORBORUS, Meig.

Borborus Amazonicus.

Fœm.—Nigra, capite nitente, frontalibus atris, antennis, scutelloque piceis, pedibus validis longiusculis, tarsis dilatatis, alis nigricante cinereis.

Female.—Black; head shining in front; frontalia deep black; antennæ piceous, very small; scutellum piceous; abdomen dull; legs stout, rather long; tarsi dilated; wings blackish grey; veins black.

Length of the body 3 lines; of the wings 6 lines.

Valley of the Amazon.

Sub-fam. 3. LAURANIDES.

SYNOPSIS.

- * Scutellum parvum.
- † Caput non transversum. *Lonchæa*, Fall.
- †† Caput transversum. *Zygothrica*, Wied.
- * * Scutellum abdomen obtegens. *Celyphus*, Dalm.

Genus LONCHÆA, Fall.

Lonchæa albimanus.

Fœm.—Nigro-ænea, scutello ferrugineo, abdomine nigro-piceo, pedibus piceis, tibiis posterioribus albido-fasciatis, tarsis posterioribus albidis, alis lurido-subcinereis, venis testaceis, halteribus albis.

Female.—Blackish æneous; scutellum ferruginous; abdomen piceous black, shining; legs piceous; posterior tibiæ with a whitish band; posterior tarsi whitish; wings slightly greyish, with a very slight lurid tinge; veins testaceous; halteres white.

Length of the body $2\frac{1}{2}$ lines; of the wings 5 lines.

South America.

Sub-fam. 4. ORTALIDES.

SYNOPSIS.

- * Facies convexa.
- † Caput non dilatatum.
- ‡ Palpi dilatati.
- § Caput acuminatum. *Oxycephala*, Macq.
- §§ Caput non acuminatum.
 - × Abdomen ovatum.
 - Caput tumidum. *Dichromyia*, Macq.
 - ++ Caput non tumidum.
 - ++ Femora gracilia.
 - ∞ Alarum areola analis elongata. *Loxoneura*, Macq.
 - ∞∞ Alarum areola analis brevis. *Camptoneura*, Macq.
 - +++ Femora crassa. *Ropalomera*, Wied.
 - ×× Abdomen cylindricum, thorace angustius. *Euripalpus*, Macq.
 - ++ Palpi non dilatati.
 - § Antennæ epistoma attingentes; articulus 3^{us} 2^o quadruplo longior.
 - × Epistoma prominens.
 - Arista villosa.
 - ++ Femora postica gracilia.
 - ∞ Areola analis elongata. *Eniconeura*, Macq.
 - ∞∞ Areola analis brevis. *Cleitamia*, Macq.
 - +++ Femora postica crassa. *Richardia*, Desv.
 - ++ Arista nuda. *Senopterina*, Macq.
 - ×× Epistoma non prominens. *Herina*, Desv.
 - §§ Antennæ epistoma non attingentes; articulus 3^{us} 2^o triplo longior.
 - × Antennæ apud frontis apicem insertæ.
 - Frons non prominens.
 - ++ Antennarum articulus 3^{us} supra concavus subtus convexus. *Ceroxys*, Macq.; et *Epidisma*, Macq.
 - ++++ Antennarum articulus 3^{us} ovatus.
 - ∞ Oculi rotundi. *Amethysta*, Macq.
 - ∞∞ Oculi ovati.
 - Corpus metallicum.
 - Statura sat magna. *Lamprogaster*, Macq.
 - = Statura parva. *Ulidia*, Meig.
 - Corpus non metallicum.
 - Venæ transversæ non approximatæ. *Platystoma*, Latr.

- = Venæ transversæ approximatae. *Heterogaster*, Macq.
- → Frons prominens, acuminata. *Notacanthina*, Macq.
- × × Antennæ sub frontis marginem insertæ. *Cruphiocera*, Macq.
- †† Caput dilatatum. *Plagiocephala*, Wied.
- * * Facies plana.
- † Antennæ non supra insertæ.
- ‡ Antennæ epistoma attingentes
- § Areola analis non acuminata. *Odontomera*, Macq.
- §§ Areola analis acuminata.
- × Femora non spinosa.
- Epistoma prominens; palpi dilatati. *Bactrocera*, Macq.
- → Epistoma non prominens.
- ++ Oviductus longus, gracilis, cylindricus. *Leptoxyx*, Macq.
- ++ + Oviductus, brevis latus, depresso. *Dacus*, Fabr.
- × × Femora spinosa. *Meracantha*, Macq.
- †† Antennæ epistoma non attingentes.
- § Maris frons setis duabus capitatis. *Ceratitis*, Macleay.
- §§ Frons setis nullis capitatis.
- × Antennarum articulus 2^{us} apice obliquus; 3^{us} subtus rotundatus. *Campylocera*, Macq.
- × × Antennarum articulus 2^{us} apice quadratus. *Trypeta*, Meig.
- †† Antennæ supra insertæ. *Epicerella*, Macq.

Genus ROPALOMERA, Weid.

Ropalomera tibialis.

Mas. et *Fœm.*—Nigro-fusca, fronte lutea, nigro-vittata, facie piceâ, strigis duabus inferioribus albis, thorace vittis septem albis, metathorace abdomeque albido-tomentosis, hujus basi fulvo, pedibus nigris pilosissimis, femoribus posterioribus incrassatis fulvo-variis, tarsis basi testaceis, alis cinereis fusco-nebulosis.

Male and female.—Dark brown; front luteous, with a black stripe; face piceous; a white streak on each side beneath; thorax with seven white stripes; pectus with a white stripe on each side; scutellum very prominent; metathorax and abdomen with whitish tomentum, the latter tawny at the base; legs black, very pilose; posterior femora very thick, partly tawny; tarsi towards the base and knees testaceous; fore tibiæ partly tawny; wings grey; veins black, tawny at the base, partly clouded with brown; præbrachial

transverse vein and exterior part of præbrachial vein clouded with dark brown; halteres whitish. *Male.*—Hind tarsi wholly black.

Length of the body 4—5½ lines; of the wings 10—12 lines.

Valley of the Amazon.

Ropalomera nebulosa.

Fœm.—Nigro-fusca, capite ferrugineo, facie convexâ nigrâ nitente, thorace cinereo vittis quatuor incompletis, abdomine e maculis albidis quadrivittato, pedibus nigris incrassatis, tarsis testaceis apice nigris, alis cinereis nigricante maculatis.

Female.—Blackish brown; head ferruginous on the vertex and in front; face convex, black, shining; antennæ black; thorax with cinereous tomentum, which is interrupted by four incomplete stripes; abdomen with four rows of whitish shining spots; legs black, incrassated; tarsi testaceous, with black tips; wings grey, with many blackish, spots which are paler and finally obsolete towards the interior border; veins black; halteres whitish.

Length of the body 3½ lines; of the wings 8 lines.

Valley of the Amazon.

Ropalomera substituta.

Fœm.—Nigro-fusca, vertice antico fulvo, facie testaceâ, antennis fulvis, thorace vittis quatuor auratis unâque cinereâ, abdomine e maculis albidis quadrivittato, pedibus validis subpilosis, tarsis basi testaceis subaustratis, alis cinereis, halteribus albidis.

Female.—Blackish brown; vertex tawny in front; face testaceous; antennæ tawny; thorax with four gilded stripes and with a middle cinereous stripe; abdomen with four rows of whitish spots; oviduct black, shining; legs stout, slightly pilose; not incrassated; tarsi testaceous and slightly gilded at the base; wings grey, veins black; halteres whitish.

Length of the body 3½ lines; of the wings 7 lines.

Brazil.

Genus DICHROMYIA, Desv.

Dichromyia? punctipennis.

Mas.—Nigra, nitens, capite ferrugineo, alis nigris albo-punctatis, alulis niveis maximis.

Male.—Black, shining; head ferruginous in front and on each side beneath, where it is tumid; wings black, with numerous minute white dots; alulae snow white, very large.

Length of the body $3\frac{1}{2}$ lines; of the wings 8 lines.

South Africa.

This species and a few more have the alulae like those of the *Muscidæ Calypteræ*, but differ from them in every other character.

Genus *LOXONEURA*, Macq.

Luxoneura Perilampoïdes.

Fæm.—Viridis, crebrè punctata, subtns nigra, capite antennisque rufescens, scutello abdomineque cyaneis, hōc dilatato, femoribus anticis spinosis, alis subeinereis, costa fasciisque duabus nigris, guttis costalibus albis.

Female.—Green, thickly punctured, black beneath; head and antennæ reddish; proboscis and palpi black; thorax conical; scutellum and abdomen blue, the latter much broader and shorter than the thorax; legs black; fore femora spinose; wings slightly greyish, black along the costa and with two black bands; three minute white costal dots.

Length of the body 5 lines; of the wings 12 lines.

Genus *LAMPROGASTER*, Macq.

Lamprogaster lepida.

Fæm.—Læte viridis, capite rufescente, fronte ex parte piecâ, pedibus fulvis, tarsis testaceis apice nigris, tibiis anticis ex parte piecis, alis luteis, strigis transversis guttaque subcostali fuseis, alulis halteribusque fulvis.

Female.—Bright metallic green; head reddish; front partly piecous; legs tawny; tarsi testaceous, with black tips; fore tibiæ partly piecous; wings luteous, with brown streaks at the base, with a brown streak extending from the pæbrachial transverse vein towards the costa, with a brown streak on the discal transverse vein, with a brown exterior subcostal dot, and with a brown costal and apical streak; alulae and halteres tawny.

Length of the body 4 lines; of the wings 10 lines.

Celebes.

Genus *ULIDIA*, Meig.

Ulidia? fulviceps.

Fœm.—Aureo-viridis, capite antennisque fulvis, abdomine ex parte cupreo, pedibus testaceis, tarsis anticis ex parte nigris, alis limpidissimis, venis halteribusque testaceis.

Female—Bright golden green; head and antennæ tawny; third joint of the antennæ subfusciform; proboscis black; abdomen partly cupreous; legs testaceous; fore tarsi with black tips; wings quite limpid; veins pale testaceous; præbrachial vein curved exteriorly and joining the cubital vein near its tip; halteres testaceous.

Length of the body $2\frac{1}{2}$ lines; of the wings $4\frac{1}{2}$ lines.

Hindostan.

Genus *HERINA*, Macq.

Herina determinata.

Fœm.—Nigra, capite supra cupreo anticè testaceo, thorace vittis abdomineque fasciis indistinctis cinereis, oviductu elongato, tarsis ferrugineis, alis albis, basi vitta arcuata postica fasciisque duabus nigris.

Female.—Black; head cupreous, black hindward, testaceous and with whitish tomentum in front; thorax with indistinct cinereous stripes; abdomen with indistinct cinereous bands; oviduct elongated; tarsi ferruginous; wings white,—black, with the exception of the hind border, for one third of the length from the base, with a curved black stripe extending near the hind border and connected with two black bands, which are dilated in front; veins black; subcostal and cubital veins connected by a transverse veinlet; præbrachial vein curved.

Length of the body $3\frac{1}{2}$ lines; of the wings 7 lines.

Valley of the Amazon.

Herina decisa.

Fœm.—Nigro-viridis, capite ferrugineo, antennis rufescentibus, abdomine pedibusque nigris, genubus tarsisque ferrugineis, alis nigris, basi fasciisque tribus albis, halteribus albidis.

Female.—Blackish green; head ferruginous; antennæ reddish; abdomen black; legs black; knees and tarsi ferruginous; wings

black, white at the base and with three white bands; one near the base, the second just within the discal transverse vein, the third oblique and subapical; halteres whitish.

Length of the body 2 lines; of the wings 5 lines.

Brazil.

Herina nigritula.

Fœm.—Nigro-viridis, capite supra testaceo, antennis pedibusque nigris, abdomine attenuato, tarsis piceis, alis limpidis, vitta costali nigra, venis albidis, halteribus nigris.

Female.—Greenish black; head testaceous above; antennæ and legs black; abdomen attenuated; tarsi piceous; wings limpid, with an irregular black stripe along the costa; veins whitish; halteres black.

Length of the body $1\frac{3}{4}$ line; of the wings 3 lines.

Valley of the Amazon.

Herina intrudens.

Fœm.—Nigro-cyanea, capite antice ferrugineo, abdominis apice attenuato, pedibus nigris, tarsis basi testaceis, alis albis, fasciis quatuor antice nigris posticè cinereis.

Female.—Bluish black; head dark blue; ferruginous in front; abdomen attenuated at the tip; legs black; tarsi testaceous at the base; wings white, with four bands which are blackish along the costa, pale grey hindward; third and fourth bands connected on the costa; halteres whitish.

Length of the body $1\frac{3}{4}$ lines; of the wings $2\frac{1}{2}$ lines.

Valley of the Amazon.

Herina? divisa.

Mas.—Fulva, antennarum articulo 3° linearis longiusculo, abdome brevi lato nigro-cyaneo punctato, pedibus testaceis, alis limpidis, linea costali venisque nigris, halteribus albidis.

Male.—Tawny; third joint of the antennæ linear, rather long; abdomen dark blue; punctured, rather short, broader than the thorax; legs testaceous; wings limpid, with a black costal line; veins black; halteres whitish.

Length of the body 2 lines; of the wings 4 lines.

Para.

Genus **TRYPETA**, Meig.

Trypeta lutescens.

Fœm.—Fulva, subcervino tomentosa, antennis testaceis, aristâ nigrâ angulatâ abdomine ovato fasciis nigris, pedibus testaceis, alis nigris strigis quatuor maculisque quatuor vitreis, strigis duabus exterioribus nigris.

Female.—Tawny, covered above with pale fawn coloured tomentum; proboscis black; antennæ testaceous; third joint elongate; arista black, bare, bent near the base; abdomen oval; acuminate at the tip, with a black band on the fore border of each segment excepting at the base; legs testaceous; tibiæ with black apical spines; wings black, vitreous at the base and towards the tips, with three vitreous costal streaks, one longitudinal, the other two transverse, with a transverse vitreous discal streak, with four vitreous spots, and with two black exterior streaks, one extending along the costa to the tip, the other oblique and in the disk; halteres testaceous.

Length of the body 4 lines; of the wings 7 lines.

Valley of the Amazon.

Trypeta sinica.

Mas.—Fulva, capite apud oculos thoraceque subcervino tomentosis, abdomine fasciis tribus nigris, 3^a subapicali latissimâ, alis nigro-fuscis, basi vitreis, fulvo-subfasciatis, maculis duabus costalibus trigonis, lituris nonnullis transversis posticis apicibusque vitreis, strigis duabus exterioribus nigro-fuscis.

Male.—Tawny, with stout black bristles; head, about the eyes and thorax, with pale fawn-coloured tomentum; scutellum and metathorax shining; abdomen oval, with three black bands; the third subapical, much broader than the others; wings blackish brown, vitreous, with a slight tawny band near the base, with two triangular vitreous spots on the costa and with some transverse hindward vitreous marks; tips vitreous, with two blackish-brown streaks, one extending along the costa to the tip, the other oblique and in the disk.

Length of the body 3 lines; of the wings 6 lines.

China.

Trypetta tubifera.

Fæm.—Fulva, thorace subtomentoso, abdomine ovato, oviductu cylindrico longissimo apice nigro, alis vitreis, vittis tribus testaceis ex parte fusco-marginatis, 2^a obliquâ extus costali, 3^a angulatâ posteriore.

Female.—Tawny; thorax slightly tomentose; abdomen oval; shorter than the thorax, excepting the oviduct, which is slender, cylindrical, black at the tip and longer than the other part of the abdomen; wings vitreous, with three testaceous partly brown bordered stripes, the first extending from the base in the disk and ending on the costa at half its length, the second extending obliquely from near the hind border to the costa, which it accompanies to the tip of the wing, the third forming an acute angle behind the 2nd and nearly parallel to it.

Length of the body with the oviduct 4½ lines; of the wings 7½ lines.

China.

Sub-fam. 5. SEPSIDES.

SYNOPSIS.

- * Pedes non longi.
- † Antennæ epistoma superantes.
- ‡ Abdomen non petiolatum. *Omalocephala*, Macq.
- †† Abdomen petiolatum. *Conopsida*, Macq.
- ††† Antennæ epistoma attingentes. *Michogaster*, Macq.
- †††† Antennæ epistoma non attingentes. *Sepsis*, Fall.
- * Pedes longi.
- † Caput elongatum.
- ‡ Arista apicalis. *Longina*, Weid.
- ‡‡ Arista articuli 3ⁱ apicem versus inserta. *Nerius*, Fabr.
- ‡‡‡ Arista articuli 3ⁱ basi inserta.
- § Caput valdè elongatum. *Cardiacephala*, Macq.
- §§ Caput subelongatum. *Toxopoda*, Macq.
- †† Caput rotundatum. *Setellia*, Desv.

Genus *SOPHIRA*, Walk.*Sophira distorta.*

Mas.—Fulva, nitens, pubesceus, capite testaceo vittâ fasciâque anticâ nigris, abdomine subfusiformi vittis duabus nigricantibus, alis subluteis, fusco quadri- aut quinque vittatis, margine postico subcinereo.

Male.—Tawny, shining, pubescent; head testaceous, with a black stripe, which is narrower in front, and with a black band on the face; arista black; abdomen subfusiform, longer and narrower than the thorax, with two indistinct blackish stripes; legs rather long and slender; wings slightly luteous, greyish along the hind border, with four or five irregular brown stripes, of which the darkest and most regular is along the costa, the latter is slightly dilated beyond the middle; radial vein curved towards the costa; cubital vein slightly curved towards the præbrachial, opposite the curve of the radial; tip of the præbrachial curved towards the cubital; discal transverse vein very oblique, parted by hardly one fourth of its length from the border and by a little more than its length from the præbrachial transverse vein.

Length of the body 6 lines; of the wings 4 lines.

Celebes.

Sub-fam. 6. PSILIDES.

Cleigaster, Macq.; *Epistoma setosa*.

Chyliza, Fall.; *Epistoma nuda*.

Sub-fam. 7. OSCINIDES.

Genus OSCINIS, Fabr.

Oscinis scita.

Fæm.—Nigra, capite apud oculos fulvo subtus albido, antennis testaceis articuli 3ⁱ apice nigro, pectore thoracisque lateribus testaceis, his nigro bimaculatis, abdomine basi fasciisque interruptis fulvis, alis limpidis apud costam exteriorem fuscis.

Female.—Black; head tawny above along the eyes, whitish beneath; antennæ testaceous; third joint at the tip and arista black; pectus and sides of the thorax pale testaceous, the latter with a black spot on each side; abdomen tawny at the base and with a tawny interrupted band on the fore border of each segment; underside pale testaceous, with interrupted black bands; wings limpid; apical third part brown for half the breadth from the costa; veins testaceous, black towards the tips; halteres whitish.

Length of the body 1 $\frac{1}{2}$ line; of the wings 3 lines.

South America.

Sub-fam. 8. GEOMYZIDES.

Silba, Macq.; Antennarum articulus 3^{us} 2^o plus quadruplò longior.

Piophila, Fall.; Antennarum articulus 3^{us} brevis.

Genus DROSOPHILA, Fall.

Drosophila valida.

Fœm.—Pallidè fulva, facie nigro-guttata, pectore vittis quatuor fuscescentibus, abdomine e maculis nigricantibus trivittato, pedibus testaceis, alis subcinereis, venis halteribusque testaceis, venâ costali nigrâ.

Female.—Pale tawny, with black bristles; face with a black dot by the epistoma; pectus with two pale brown stripes on each side; abdomen with three rows of irregular blackish spots; legs testaceous; wings slightly greyish; veins testaceous; costal vein black; halteres pale testaceous.

Length of the body 1½ line; of the wings 3 lines.

United States.

Sub-fam. 9. PHYTOMYZIDES.

Genus AGROMYZA, Fall.

Agromyza invaria.

Fœm.—Nigra, nitens, tarsis et tibiis anticis testaceis, alis limpidis, venis nigris.

Female.—Black, shining; tarsi and fore tibiæ testaceous; wings limpid; veins black.

Length of the body ¾ line; of the wings 1½ lines.

United States.

Genus PHYTOMYZA, Fall.

Phytomyza solita.

Mas.—Cinerea, capite luteo-fulvo, guttâ verticis antennisque nigris, abdominis segmentis albido-marginatis, genibus testaceis, alis subcinereis, venis nigris, halteribus albidis.

Male.—Cinereous; head luteous tawny; a black dot on the vertex; antennæ black; hind borders of the abdominal segments whitish; knees testaceous; wings very slightly greyish; veins black; halteres whitish.

Length of the body $1\frac{3}{4}$ line; of the wings 3 lines.

United States.

Phytomyza diminuta.

Fœm.—Pallidè flava, thoracis disco cinereo, abdomine supra nigricante, alis limpidis, venis nigris.

Female.—Pale yellow; disk of the thorax cinereous; abdomen blackish above; wings limpid; veins black.

Length of the body $\frac{3}{4}$ line; of the wings $1\frac{1}{2}$ line.

United States.

Sub-fam. 10. HYDROMYZIDES.

Genus *EPHYDRA*, Fall.

Ephydra lata.

Fœm.—Nigra, nitens, pedibus piceis, alis cinereis apud venas pallidioribus, venis transversis nigro-nebulosis. ♀

Female.—Black, shining; legs piceous; wings grey, paler along the veins; transverse veins clouded with black.

Length of the body 2 lines; of the wings 4 lines.

United States.

Ephydra brevis.

Fœm.—Nigra, obscura, thorace vittis quatuor cinereis, abdomine æneo-nigro brevi latæ nitente, tarsis fulvis, alis subcinereis, venis pallidis, transversis nigris.

Female.—Black, dull; thorax with four cinereous stripes; abdomen æneous black, short, broad, shining; tarsi tawny; wings very slightly greyish; veins pale; transverse veins black.

Length of the body $1\frac{1}{4}$ line; of the wings 3 lines.

United States.

Ephydra oscitans.

Fœm.—Nigra, nitens, scutello nigro-cyaneo, pedibus fulvis, alis limpidis, areolis fusco-maculatis.

Female.—Black, shining; scutellum blackish blue; legs tawny; wings limpid, with rows of brown spots between the veins, which are black.

Length of the body 1 line; of the wings $2\frac{1}{2}$ lines.

United States.

Ephydria nana.

Fæm.—Nigra, nitens, pedibus flavis, femoribus nigris, tibiisposticis nigro fasciatis.

Female.—Black, shining; legs pale yellow; femora black; hind tibiæ with a black band; wings very slightly greyish; veins pale.

Length of the body 1 line; of the wings 2 lines.

United States.

Fam. 17. CESTRIDÆ.

Fam. 18. PHORIDÆ.

Genus PHORA, Latr.

Phora nebulosa.

Fæm.—Nigra, capite subtus, antennis pedibusque fulvis, alis obscurè cinereis apud medium sublimpidis.

Female.—Black; head tawny beneath; antennæ and legs tawny; wings dark grey; middle part nearly limpid; veins black.

Length of the body $2\frac{1}{2}$ lines; of the wings 4 lines.
Tasmania.

EPROBOSCIDÆ.

Fam. 1. HIPPOBOSCIDÆ.

The genera *Brachytarsina* (Macq. Mém. Soc. Nat. des Sci. &c. de Lille, 1850), and *Raymondia* (Frauenfeld, Akad. der Wissenschaften, 1855), may be united to Wiedemann's genus *Strebla*, which is nearly allied to *Megistopoda*. (Macq. Ann. Soc. Ent. Fr. 2^{me} Sér. X. 332.)

Genus **HIPPOBOSCA**, Linn.

Hippobosca viridipes.

Nigra; capite, pectore thoraceque antice lividis, pedibus viridibus livido-variis, tarsis nigris, femoribus tibiisque nigro-vittatis, alis subcinereis.

Black; head, pectus and fore part of the thorax livid; legs green, partly livid; tarsi black; femora and tibiæ with black stripes; wings greyish; veins black.

Length of the body $3\frac{1}{2}$ lines; of the wings 8 lines.

New South Wales.

NEMOCERA.

Fam. **BIBIONIDÆ.**

Genus **BIBIO.**

Bibio Zealandicus.

Fæm.—Niger, ventre ferrugineo, femoribus rufis apice nigris, alis fuscescente cinereis, stigmate venisque costalibus nigris, posterioribus pallidis.

Female.—Black; abdomen ferruginous beneath; femora red, with black tips; wings brownish grey; veins and stigma black; posterior veins pale.

Length of the body $4\frac{1}{2}$ lines; of the wings 8 lines.

New Zealand.
